

I. INTRODUCTION

- A. Under the supervision of Response and Recovery Section Manager NEMA was designated to prepare the Nebraska Hazard Mitigation Plan for submission to the Federal Emergency Management Agency (FEMA). This plan is a continuation of the previous Nebraska mitigation planning efforts.
- B. The State will comply with all applicable Federal statutes and regulations during the periods for which it receives grant funding, in compliance with 44 CFR 13.11(c), and will amend its plans whenever necessary to reflect changes in State or federal laws and statutes as required in 44 CFR 13.11(d).

II. NEBRASKA MITIGATION PLANNING HISTORY

A. Initial Planning

- 1. The first Nebraska Hazard Mitigation Plan was written in 1985. This plan was developed by the Nebraska Emergency Management Agency with the assistance of the following State Agencies: Department of Natural Resources; Department of Health and Human Services; Department of Economic Development; Department of Agriculture; Nebraska Historical Society
- 2. These agencies participated in the planning meetings and by reviewing and making suggestions for revisions to the drafts. Subsequent revisions were completed using the same process and agencies.

B. The Governor's Task Force for Disaster Recovery

- 1. In January of 1994, following a year of significant flooding and tornadoes that culminated in two Federal Disaster Declarations the Governor signed Executive Order 94-3 directing the creation of the Governor's Task Force for Disaster Recovery. This Task Force is co-chaired by the Department of Natural Resources and the Emergency Management Agency and is made up of the agencies listed above with the addition of the following: Department of Environmental Quality and the Department of Labor
- 2. The Executive Order also requested the support of Federal Agencies including the Army Corps of Engineers, USDA and FEMA to recover from the floods of 1993
- 3. The Task Force was directed to coordinate disaster recovery with an emphasis on efficient utilization of Federal supplementary appropriations. This Task Force has become known as the Governor's Task Force for Hazard Mitigation because their main activity has been oversight of the HMGP program. The membership of the Task Force makes up the Nebraska planning team that has been used in the preparation of Hazard Mitigation Plans since 1994, including this plan.

III. BACKGROUND OF THE ALL HAZARD STATE MITIGATION PLAN

- A. Beyond NEMA, different State organizations have compiled separate mitigation plans that affected the creation of this plan. In April of 2002, the Nebraska Department of Natural Resources created a flood mitigation plan in response to consistent flooding issues in the State. The purpose of the plan is to explain flood mitigation and flood mitigation planning, chronicle previous flood problems of Nebraska, and recommend alternative procedures which might be used to reduce the problems. The stated objective of the plan is to focus on the elimination of damages to public and private structures while minimizing damage to agricultural lands in Nebraska. The information from this document is a major contributor to the flooding section of Part II Risk Analysis.
- B. Largely as a result of the experiences in responding to the drought of 1988-89, the State of Nebraska began to consider ways to improve the effectiveness of the State's drought plan. One of the recognized limitations of the in place Drought Assessment and Response Team (DART) was that it functioned largely on an "ad hoc" basis with limited authority and little continuity between administrations. In 1991, Legislative Bill 274 was introduced in the 2nd session of the 92nd Legislature. The purpose of this bill was to establish the Climate Assessment and Response Committee (CARC) under the leadership of the Office of the Governor, LB 274 was passed by the Legislature in 1991 and replaced the functions of DART. As a result of this bill, leadership of CARC shifted to the Governor's Office and chairmanship of CARC was transferred to the Nebraska Department of Agriculture. CARC broadened the range of authority to include other potential climate-related natural hazards, however, drought has received most of the attention of CARC since it was created.
- C. A drought mitigation plan was created in 1999 by the Nebraska Municipal Water Supply, Health, and Energy Subcommittee of the Climate Assessment and Response Committee (CARC). The committee is further discussed on page I-5 and their mitigation objectives and implementation measures are included as State mitigation goals in that section of the plan.
- D. NEMA's planning for hazard mitigation has mirrored national planning guidance, complying with federal regulations as they were adopted. The Flood Insurance Act of 1956. This was followed up by the National Flood Insurance Act of 1968. In Section 406 of the Disaster Relief Act of 1974, states were required to evaluate the hazard in the areas where loans and grants were being allocated and to implement mitigation actions that would minimize their future impact.
- E. Several Executive Orders in the late 1970's addressed additional flood mitigation measures that States were required to abide by. Mitigation actions were furthered with the amendment of the Disaster Relief Act by P.L. 100-707. In 1991, the Community Rating System became effective. The National Flood Insurance Reform Act was approved in 1994 and with it the Flood Mitigation Assistance Program. These and other federal mitigation actions helped mitigation efforts in the State.

IV. OUTLINE OF THE PROCESS

- A. On November 20, 2002, an important meeting occurred to begin mitigation planning with State and Federal agencies. The agencies of the Governor's Task Force were invited to be part of the process that began with this meeting. Eight State agencies and two Federal agencies met to identify hazards in the State of Nebraska and then identify appropriate mitigation measures for these disasters. The variety of agencies involved provided the expertise and difference of perspective for effective, efficient mitigation planning. A detailed account of this meeting's results is given in Part II Risk Assessment. Meeting attendance:

Name	Position/Title	Representing
Lori Moore	State Hazard Mitigation Officer (SHMO)	NEMA
Terry Marshall	Contractor	Marshall Consulting
Janelle Mavis	Natural Disaster	Omaha District- US Army Corps of Engineers
Steven Kisner	Warning Coordination Meteorologist	National Weather Service
Brian Smith	Warning Coordination Meteorologist	National Weather Service
Jim Fuller	Division Administrator	Game and Parks
Jim Carney	Regional Manager	Game and Parks
Steve McMaster	Water Resources Planner	Department of Natural Resources
Dalyce Ronnau	Research Engineer	Department of Roads
Brian Dunnigan	Floodplain Mngt./ Dam Safety	Department of Natural Resources
Ken Fougeron	State Building Administrator	Department of Administrative Services-Building Division
Bryan Tuma	Major	Nebraska State Patrol
Jack Daniel	Public Water Division Manager	Health and Human Services
Jay Ringenberg	Deputy Director	Department of Environmental Quality

- B. NEMA contracted Marshall's Consulting of Hastings, Nebraska to research hazard history in Nebraska and prepare an initial draft of the State Hazard Mitigation Plan. Mr. Marshall attended the November 20th meeting and then over the course of the next six months met several times with the Department of Administrative Services Building Division and Department of Natural Resources to obtain more information on hazard history and State facility vulnerability. Following this research, the contractor submitted a copy of the initial draft to the Department of Natural Resources for their review.

- C. The Response and Recovery Section of the Nebraska Emergency Management Agency, working with individuals from the Department of Roads, Building Administration, and Department of Natural Resources further refined the plan and in the winter of 2003, the plan was sent to the agencies of the Governor's Task Force, revised with their input and a final copy submitted to FEMA for approval. Once FEMA has conditionally approved the plan, it will be submitted to the Governor of the State of Nebraska for adoption and implementation. The final plan will be submitted to the Federal Emergency Management Agency Region VII for final approval.

V. MITIGATION TEAMS, POSITIONS AND ORGANIZATIONS

A. **Governor's Disaster Recovery Task Force**

1. As previously stated in January of 1994, the Governor's Disaster Recovery Task Force was established to insure coordinated and efficient disaster relief and recovery operations and make a detailed examination of all features of the State's recovery efforts including hazard mitigation grant programs. The Task Force is jointly co-chaired by the Nebraska Emergency Management Agency and the Nebraska Department of Natural Resources. The other agencies comprising the Task Force are:
 - a. Department of Health and Human Services
 - b. Department of Economic Development
 - c. Department of Environmental Quality
 - d. Department of Agriculture
 - e. Department of Labor
 - f. Department of Administrative Services
 - g. Nebraska Historical Society
2. The Executive Order requested the support of the following Federal Agencies in planning for and mitigating disasters:
 - a. U.S. Army Corps of Engineers
 - b. USDA emergency organizations
 - c. U.S. Department of Housing and Urban Development
 - d. Environmental Protection Agency

3. This Task Force is the planning team for the Nebraska Hazard Mitigation Plan and is tasked with identifying the priority of hazard mitigation projects for both the pre and post Hazard Mitigation grant programs.

B. State Hazard Mitigation Officer (SHMO)

This position was established to coordinate the activities of the State Hazard Mitigation Team (see next description), coordinate mitigation efforts of State and local agencies including planning, conduct hazard analyses, organize mitigation training, and administer FEMA Hazard Mitigation Grant programs other than the Flood Mitigation Program, and to over see Subgrantee projects.

C. State Hazard Mitigation Team

The State Hazard Mitigation Team, made up of selected Task Force member agencies by the co-chairs, meets following a disaster to determine first the effectiveness of completed mitigation projects in the disaster from the hazard. The composition of this team depends on the type and location of current disaster. Following the meeting of the Governor's Task Force to identify project priority, this team reviews application for the HMGP program and makes recommendation to the Task Force of the most effective projects to present to FEMA for acceptance.

D. Drought Organizations

Since drought is a continual hazard, two organizations have been formed to help relieve some of the effects in the state.

1. Drought Management Team

- a. In 2000, Governor Johanns appointed a Drought Management Team. This Team included members from: Department of Agriculture; Department of Natural Resources; Health and Human Services, Water Division; Nebraska Emergency Management Agency; Nebraska State Patrol; Department of Roads; Military Department; State Fire Marshall; The Governor's Policy Research Office
- b. This team met with the Governor to share information and discuss measures to be take to relieve drought effects like roadside haying, the Rural Mental Health Hotline, measures to aid stressed municipal water systems, the writing and dissemination of drought contingency plans for local governments, and water conservation measures to all municipalities. This team has continued to meet as called by the Governor during drought years.

2. Climate Assessment and Response Committee (CARC)

- a. The Nebraska Climate Assessment and Response Committee is a legislatively authorized group with a variety of tasks. One project was the creation of the State Drought Mitigation Plan by the Municipal Water Supply, Health, and

Energy Subcommittee in 1999. The mitigation goals adopted by CARC mirror those of the State plan and are included in Part III Mitigation Strategy. CARC's role in State mitigation extends beyond simple rainfall calculations and includes advising the Governor on requests for Federal disaster declarations and coordinating Federal and State agencies for mitigation actions. CARC is comprised of the following agencies: Policy Research Office; Department of Agriculture; Department of Natural Resources; Health and Human Services ; Cooperative Extension, UNL; Conservation and Survey Division, UNL; A Nebraska Livestock Producer; A Nebraska Crop Producer; Nebraska Emergency Management Agency; and others as the Governor deems necessary.

- b. This group is advised by a variety of other State and federal agencies. CARC is broken down into three committees of which are broken into various subcommittees. The three committees are:
 - 1) Water Availability and Outlook Committee
 - 2) Risk Assessment Committee
 - 3) Emergency Response Committee
- c. The Municipal Water Supply, Health, and Energy Subcommittee of the Risk Assessment Committee drafted the drought mitigation objectives for the State in 1999. The mitigation actions were reviewed and amended during a March 9, 2004, meeting. Details of this meeting are included in Part III – Mitigation Strategy.

E. Federal Agencies and Federal Involvement

- 1. FEMA, the U.S. Army Corps of Engineers, and the National Weather Service all played an integral part of this planning process. These other federal agencies contributed to the formation of this and previous Nebraska Mitigation Plans:
 - a. U.S. Army Corps of Engineers
 - 1) Missouri River Division
 - 2) Omaha District
 - 3) Kansas City District
 - b. U.S. Department of Transportation
 - c. U.S. Small Business Administration

- d. U.S. Department of Agriculture
 - e. U.S. Environmental Protection Agency Region VII
 - f. U.S. Department of Health and Human Services
 - g. U.S. Geological Survey
2. FEMA provided training and workshops on the Disaster Mitigation Act of 2000 and the companion regulations for state emergency management agencies. Also, FEMA supplied an educational power point presentation on hazard mitigation to the Nebraska Emergency Management Agency for use with other State agencies, elected officials, and city and county emergency management departments.
 3. Nebraska has participated in many FEMA programs such as the Hazard Mitigation Grant Program, the National Flood Insurance Programs, Flood Mitigation Assistance Program, the Pre-Disaster Mitigation Program and Project Impact. Project Impact in particular has helped four communities across the State- Beatrice, Superior, Scottsbluff, and Grand Island.
 4. The U.S. Army Corps of Engineers participated in the November 20, 2002, working session where possible mitigation projects were identified. The National Weather Service participated in that same working session and also provided many facts and statistics to aid in vulnerability assessments across the State.

F. Other Interest Groups

Coordination relating to mitigation planning under the Act involved two other major groups within the State, the Public Power Districts and the Natural Resources Districts.

1. Public Power Districts

- a. Nebraska is the only State in the country served by an electric power system that is owned entirely by its own citizens. In 1933, the Nebraska Legislature passed an enabling act that authorized the formation of public power and irrigation districts as public corporations and political subdivisions of the State. Today, Nebraska's forty Public Power Districts distribute all the electrical power in the State. Their assets include power transmission lines, power generation facilities, and other structures critical to providing consistent electrical power.
- b. Because all of Nebraska's power is public, the Public Power Districts are eligible applicants for both Public Assistance and Hazard Mitigation Grants. A large percentage of damages from wind related storms like thunderstorms, tornadoes, and severe winter storms come from the public power districts. The following chart demonstrates the large percentage of funds that Public Power

Districts receive for hazard mitigation and Public Assistance actions. For this reason plus the fact that their district boundaries do not conform to any other political subdivision in the State, they are included in the State Plan.

Federal Disaster #	Year	HMGP Federal \$ to PPDs only	PA Federal \$ to PPDs only	PA Total Federal \$ Paid	% of total to PPDs
998	1993	\$ 1,528,099.00	\$ 21,604,222.00	\$ 45,963,467.00	47.00%
1027	1994	\$ 3,052,640.00	\$ 25,419,389.00	\$ 28,866,703.00	88.06%
1123	1996	0	\$ 8,424.00	\$ 2,355,576.00	0.36%
1190	1997	\$ 691,447.00	\$ 13,923,118.00	\$ 35,723,476.00	38.97%
1286	1999	\$200,760	\$ 146,888.75	\$ 2,077,781.23	7.07%
1373	2001	\$ 349,628.00	\$ 2,843,462.62	\$ 2,851,799.07	99.71%
1394	2001	\$ 125,047.00	\$ 30,944.71	\$ 1,533,655.75	2.02%
1480	2003	\$242,461	\$ 1,387,976.63	\$ 2,098,281.16	66.15%
Total		\$6,190,028.00	\$ 65,364,425.71	\$ 121,470,739.21	53.81%

- c. FEMA Disaster numbers 1123, 1286, and 1394 were flooding disasters in which Public Power District involvement was not primary. For the rest of the disasters, however, the public power districts were granted an average of 68% of the funds given for disaster relief.
- d. NEMA held three meetings with representatives of the Nebraska Public Power District, the only district so far that has developed an all-hazards plan for their district. This plan is included as Annex 1. Once the NPPD plan is accepted by FEMA, NEMA is planning to hold informational meetings with other Public Power Districts and using NPPDs plan, to aid them in the preparation of plans for their districts.
- e. General Information
 - 1) The Public Power Districts generate their own electricity through a system of power plants including two nuclear plants, coal-fired power plants, hydroelectric power generation, and a small amount of wind power. Public Power Districts provide a number of other services such as irrigation networks, internet services, energy conservation programs, and educational programs.
 - 2) The main function of the Public Power Districts is supplying and maintaining the energy flow to the citizens of Nebraska. To accomplish this, an extensive network of power distribution exists throughout the State. This network consists of high voltage transmission lines that supply secondary distribution networks that in turn supply industry, businesses, and homes. Within this network are a number of sub-station transformers

designed to step up voltage or reduce voltage for consumer use. A majority of the transmission lines are above ground on wooden or steel structures. In communities an increasing trend is to place electrical lines underground, an important detail for mitigation planning.

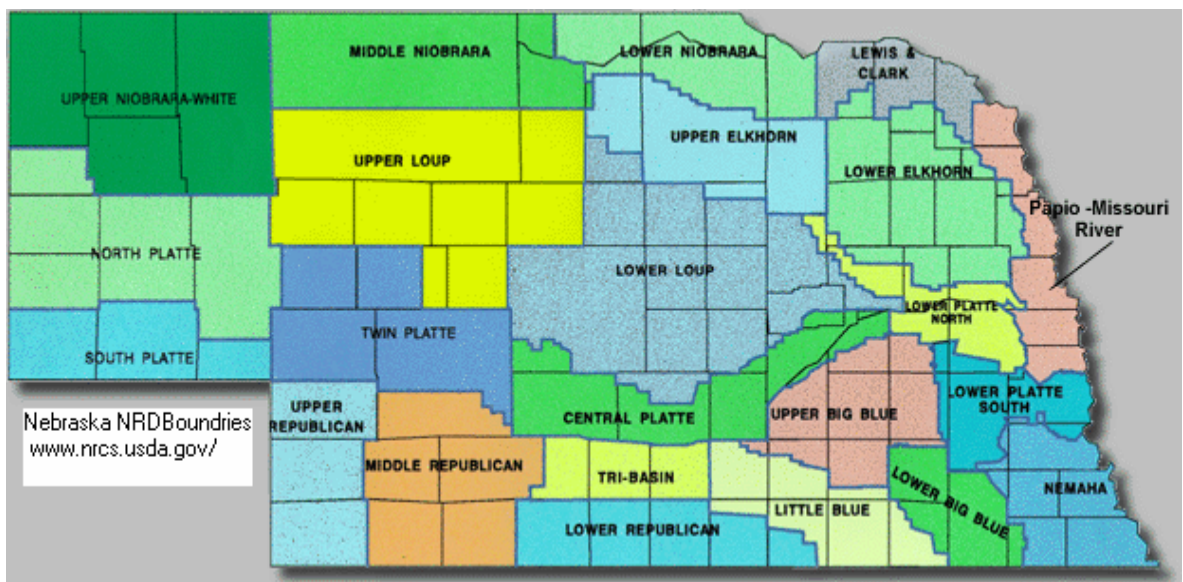
- f. Mitigation Efforts and Planning: By placing lines underground there is a reduced risk of power interruption from winter storms, high wind events, tornado's, and severe thunderstorms. With above ground power lines, a number of power disruption events have occurred over large areas of the State due to ice storms, blizzards and extreme high wind events. Lengths of power outages have been from a few hours to a couple of weeks; these disruptions result in significant economic losses to businesses, industry and disruption of services to residential users. To combat this, the Public Power Districts used State Hazard Mitigation funds to both strengthen existing aboveground lines or strengthen structures that support the lines. Because of these efforts, damages to power distributing structures and economic losses due to power outages are held at a minimum.

2. Natural Resources Districts:

The second group critical to the State is Natural Resources Districts (NRDs). These districts are vital to water management, flood control, and other projects within their taxing authority. Within the NRDs there are existing procedures that provide for review of mitigation projects that a NRD may undertake.

a. General Information:

- 1) The State recognized the need to conserve, develop, and manage land and water resources so by action of the Legislature on July 1, 1972, twenty-three Natural Resources Districts became operational. The NRD jurisdictions are pictured below:



- 2) The purpose of the Natural Resources Districts is to develop and execute plans, facilities, works and programs relating to erosion, flooding, soil conservation, water supply, groundwater, pollution control, and wildlife, recreation, and forestry management. The NRDs within the State coordinate activities with the U.S. Army Corps of Engineers, United States Department of Agriculture, Nebraska Emergency Management Agency, National Weather Service, and local political sub-divisions within and adjacent to the area of proposed projects.

b. Mitigation Efforts and Planning

- 1) Natural Resources Districts have made significant progress establishing flood controls in flood prone areas of the State. These measures have reduced or in several cases eliminated flooding caused by heavy rainfall. NRDs have established 2,078 flood control structures within the State, 99 of which are considered High Hazard Dams specifically designed to control floodwater and provide for sub-surface re-charge of aquifers. Because of the history of flooding within the State of Nebraska and the fact that the Natural Resources Districts actively implement mitigation measures, mostly for flooding, their involvement in creating this plan was essential.
- 2) Like the Public Power Districts and energy distribution, NRD's provided information on flood mitigation and flood history that contributed to the drafting of this plan and also helped fuse previously determined mitigation plans. The twenty-three NRDs have unique jurisdictions and powers according to Nebraska Statutes 2-3231 and 3-3228. Because of this, Nebraska is proposing to the NRDs to be the vehicle to write the local hazard mitigation plans in the State. The Statutes provide for these powers and authorities:
 - a) 2-3231: Act as agent of the US, or any of its agencies, or for this State or any of its agencies, in connection with the acquisition, constructions, operation, maintenance or management of any project within its boundaries.
 - b) 3-3228: Invite the local governing body of any municipality or county to designate a representative to advise and counsel with the board on programs and policies that may affect the property, water supply, or other interests of such municipality or county.
- 3) This process will allow Nebraska to be covered by twenty-three regional plans and allow the NRDs to act as sub-grantees for projects in their districts. Counties and municipalities that wish to participate in the process will have an annex devoted to their specific participation in the process and the identification of their needed mitigation projects. As these local plans are completed and approved a clearer picture of mitigation

shortfalls will develop. As the shortfalls are identified, the priority issues of the local jurisdictions will be included in the State Plan. The strategy for using the NRDs as planning regions is discussed in Part III – Mitigation Strategy

VI. INTEGRATION OF OTHER PLANNING EFFORTS

A. State Planning Efforts

1. This Hazard Mitigation Plan is part of an overall planning process that is on-going in the State of Nebraska. The Department of Natural Resources has written and FEMA has approved the State of Nebraska Flood Mitigation Plan. CARC created the State Drought Mitigation Plan in 1999 which is now incorporated in the drought section of this plan.
2. NEMA has worked with the Nebraska Department of Roads and Department of Administrative Services Building Division identifying critical infrastructure for Homeland Security. During those same meetings they gathered information incorporated into hazard mitigation and it was agreed these facilities also needed protection from natural disasters as well as from possible terrorist acts. The State Emergency Operations Plan includes a discussion of mitigation as part of the Recovery Annex.
3. Critical Infrastructure Project
 - a. Another important phase of this planning process was the gathering of information useful for both this mitigation plan and the Nebraska Strategy for the Physical Protection of Critical Infrastructures and Key Assets under the direction of Homeland Security. Although the project for Homeland Security focuses on terrorism protection, the same information can be used to determine natural hazard mitigation. This project was undertaken with the cooperation with the Department of Roads, the Department of Administrative Services Building Division, and the Nebraska State Patrol. In the summer of 2003, NEMA asked the county emergency management agencies and the previously identified State organizations to supply lists of their critical infrastructure so that the protection of local essential sites could be ensured through this plan. Most of Nebraska counties choose to participate.
 - b. To help identify the State's critical infrastructure, NEMA has collected and is developing an extensive list of critical infrastructure from each county. This information has been entered into a spreadsheet, mapped, and to some extent photographed. This information is available to user with password and ID on a secure server. Future updates to this data and map will include information that will identify those facilities meeting state or national criteria as

critical infrastructure or key assets as well as risk data such as location in a flood plain.

- c. 2,455 critical infrastructure locations were identified across the State. The reported infrastructure was organized into the following categories for management and prioritization:

- 1) Energy
- 3) Defensive Base
- 4) Chemical Industry/Hazardous Material
- 5) Government
- 6) Emergency Services
- 7) Telecommunications
- 8) Internet
- 9) Transportation
- 10) Banking and Finance
- 11) Postal and Shipping
- 12) Agriculture
- 13) Food
- 14) Water
- 15) Public Health
- 16. National Monuments and Icons
- 17. Nuclear Power Plants
- 18 Dams
- 19) Commercial Key Assets
- 20) Natural Resources

4. CARC Subcommittee Meeting

- a. Since drought is an ongoing hazard in the State, the adoption of CARC's Drought Mitigation Plan into the State Plan makes sense. CARC has already accomplished extensive research on drought, created mitigation actions, and worked to relieve citizens affected by drought.
- b. On March 9, 2004, the Municipal Water Supply, Health, and Energy Subcommittee of the Risk Assessment Committee met to review the drought mitigation actions from the 1999 list of objectives. This meeting involved many State agencies as well as representatives from private organizations in the State. The outcome of this meeting were objectives and implementation measures that are included in Part III – Mitigation Strategy.

c. Meeting Attendance:

Individual	Organization
Jack Daniel (co-chair)	Nebraska Health & Human Services Regulation and Licensure
Mark Kuzila (co-chair)	UNL- Conservation and Survey Division
Russ Baker	Omaha Public Power District
Cindy Newsham	NEMA
Kevin Boyd	Central Nebraska Public Power and irrigation District
Lash Chaffin	League of Nebraska Municipalities
Joel Christensen	Metropolitan Utilities District
Doug Clark	Utilicorp
Russ Edeal	Nebraska Farm Bureau Federation
Dean Edson	Nebraska Association of Resources Districts
Mike Hayes	National Drought Mitigation Center
Craig Head	Nebraska Farm Bureau Federation
Bobbie Kriz-Wickham	Nebraska Department of Agriculture
Bob Kuzelka	The Groundwater Federation
Frank Kwapnioski	Nebraska Public Power District
Jerry Obrist	Lincoln Water System
Lee Orton	Nebraska Well Drillers Association
Jim Pratt	American Red Cross
Sharon Skipton	UNL- Cooperative Extension
Phil Soenksen	United States Geological Survey
Scott Summerside	UNL- Conservation and Survey Division
Cindy Thomsen	Nebraska Rancher
Doug Whitefoot	KN Energy

B. Federal Planning Efforts

1. Nebraska has been active in the Hazard Mitigation Grant Program after the appointment of a State Hazard Mitigation Officer. The SHMO coordinates the activities of the State Hazard Mitigation Taskforce making recommendations relative to the provisions of the Hazard Mitigation Grant Program of the Robert T. Stafford Disaster Relief and Emergency Assistance Act 93-288 as amended, and the Pre-Disaster Mitigation Grants from the Disaster Mitigation Act of 2000. So far, over \$26 million has been distributed across the State for mitigation projects.
2. The Nebraska Department of Natural Resources has legislative authority for all matters pertaining to floodplain management. This authority is extended to include the administration of the Flood Mitigation Assistance Program and the National Flood Insurance Program for Nebraska and has the authority for supplying technical assistance and guidance only. Nebraska DNR has no compliance authority.

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